

animal. If we attentively examine the fore-foot, we shall perceive on each side immediately below the knee, a transparent protuberance, coloured in some species and white in others, covering a cavity in which the extremity of the tube terminates. This transparent plate presents an analogy to that part in the crickets to which I have given the name of mirror. This prothoracic cavity is found in both sexes: the larvae and pupæ possess it: hence we may infer this organ is useful to the insect in all the stages of its existence. But what its functions are, I do not know. We cannot consider it a stigma, since it has no communication with the tracheæ; it remains constantly open, and does not appear to be under the animal's control, which is not the case with the other thoracic stigmata, which are formed of two moveable lids resembling eyes with the eyeballs removed. In order to satisfy myself that this cavity was not the opening of a stigma, I plunged a grasshopper head foremost into water, and held it there till it was drowned. The cavity remained motionless, and did not appear affected by the contact of the liquid, whilst bubbles were seen at the orifices of the four thoracic stigmata. This experiment, repeated many times and always with the same results, leads me to conclude the great prothoracic cavity is not a respiratory opening; and what makes the correctness of this conjecture more probable, is the possibility of removing the part in question, together with its tube, from the insect without injury.

To be continued.

ART. XII.—*Monographia Chalciditum.* BY FRANCIS WALKER.

(Continued from page 55.)

" —— the green myriads in the peopled grass."

GENUS ENCYRTUS—*continued.*

Fem.—Corpus breve, crassum, convexum, punctatum, parum nitens: caput transversum, breve, juxta thoraci latum; frons abrupte declivis: antennæ clavatæ, pubescentes, corporis dimidii longitudine; articulus 1^{us}. fusiformis, dilatatus; 2^{us}. longi-cyathiformis;

^{3^{us}.} et sequentes subcyathiformis, breves, usque ad 8^{um}. latescentes et curtantes; clava ovata, plana, articulo 8°. multo latior et plus duplo longior: thorax ovatus: mesothoracis scutum transversum; paraptera supra fere convenientia; scutellum brevibconicum; metathoracis scutellum semicirculum fingens: abdomen subquadratum, lœve, nitens, fere glabrum, thorace paullo brevius vix latius, subtus convexum, apice rotundatum: segmenta ventralia occulta: oviductus non exertus: alæ amplæ.

Sp. 68. En. sylvius. Fem. *Cupreus ferrugineo varius, antennæ fuscæ albo cinctæ apice nigræ, pedes fusco-fulvi, femora sapissime ænea, proalæ fusco fasciatæ.*

Encyrtus sylvius. *Dalman, Kongl. Vetens. Acad. Handl. för är, 1820; Nees ab Ess. Hym. Ich. affin. Monogr. II. 205.*

Caput ferrugineum, apud os nigrum; vertex postice fuscus: trophi ferruginei: oculi et ocelli obscure rufi: antennis articulus 1^{us}. niger; 2^{us}. et sequentes ad 6^{um}. pallide fusi; 7^{us}. et 8^{us}. albidi; clava nigra: thorax æneo-cupreus; metathorax nigro-cupreus; pectoris laminæ ferrugineaæ; abdomen nigro-cupreum, subtus et basi cupreum: pedes pubescentes; coxæ et femora ænea; trochanteres et genua ferruginea; tibiæ fuscæ; tarsi fulvi, apice fusi; propedum femora et tibiæ apice basi et subtus fulva; mesopedum femora et tibiæ ferruginea: alæ sublimpidæ, corpore longiores; squamulæ et nervi fusca, hi apud stigma obscuriores: proalæ cuique apud stigma fascia brevis lunata fusca. (Corp. long. lin. $\frac{2}{3}$ —1; alar. lin. $1\frac{1}{3}$ — $1\frac{3}{4}$.)

Var. β.—Metatibiæ fulvo fasciatæ.

Var. γ.—Caput cupreum: pectoris laminæ nigro-cupreæ: abdomen subtus purpureo-cupreum.

Var. δ.—Pedes fulvi; propedum femora extus et tibiæ basi fusca; meso- et metatarsi flavi, apice fusi; metapedum femora et tibiæ pallide fusca.

September; Isle of Wight. Found on lime-trees, in Galway, by Mr. Haliday.

Mas.—Corpus sublineare, crassum, convexum, punctatum, pubescens: caput transversum, breve, subquadratum, juxta thoraci latum; vertex latus; frons abrupte declivis: oculi mediocres, non extantes: antennæ pilosæ, corpore paullo breviores, ad articulum 8^{um}. filiformes; articulus 1^{us}. gracilis, fusiformis; 2^{us}. cyathiformis; 3^{us}. et sequentes longi, lineares, usque ad 8^{um}. paullulum curtantes; clava fusiformis, articulo 8°. paullo latior et plus duplo

longior: thorax ovatus: mesothoracis scutum transversum; paraptera fere convenientia; scutellum rhombiforme: abdomen ovatum, planum, laxe, fere glabrum, thorace paullo longius, apice hirtum: pedes pubescentes.

Fem.—Corpus quam *mari latius*: antennæ clavatae, corporis dimidio longiores; articulus 2^{us}. longi-cyathiformis; 3^{us}. et sequentes subcyathiformes, usque ad 8^{um}. curtantes et latescentes; clava brevis, oblique truncata, articulo 8°. longior et paullo latior: thorax et abdomen brevi-ovata: oviductus occultus.

Sp. 69. En. Swederi. Mas. *Ater, antennæ fulvæ apice fuscæ, pedes fulvi, metapedes nigri, alæ limpidæ.* Fem. *Ferrugineus, antennæ apice fuscæ, alæ fusco variæ.*

Encyrtus Swederi. Fem. *Dalman, Kongl. Vetens. Acad. Handl. för är, 1820; Nees ab Ess. Hym. Ich. affin. Monogr. II. 224.*

Encyrtus hirticornis. Mas. *Dalman, Kongl. Vetens. Acad. Handl. för är, 1820; Nees ab Ess. Hym. Ich. affin. Monogr. II. 223.*

Encyrtis Vitis. . . . *Curtis, Brit. Ent. 395.*

Mas.—Ater, obscurus: oculi et ocelli picei: antennæ fulvæ; articulus 2^{us}. supra fuscus; clava fusca: abdomen nitens: pedes fulvi; femora supra nigro vittata; tarsi apice fusci; metapodium femora et tibiae nigra: alæ limpidæ; squamulæ et nervi fusca.

Fem.—Ferrugineus, obscurus: oculi et ocelli picei: antennæ apice fuscæ: abdomen nitens: metapedes supra fusci; mesotibiae basi fusca; pro- et metatarsi apice hi basi quoque fusci: alæ sub-limpidae; proalæ fusco variæ; squamulæ et nervi fulva, hi apice fusci. (Corp. long. lin. 1 $\frac{1}{4}$; alar. lin. 2.)

Reared in July from the *coccus* of the vine, at Lambeth, by Mr. Samouelle. Found near Paris, by the Comte de Castelneau.

Sp. 70. En. scutellaris. Fem. *Ater, scutellum basi flavum, antennæ piceæ, pedes picei, proalæ fuscæ basi limpidæ.*

Pteromalus scutellatus. *Swederus, Kongl. Vetens. Acad. Handl. för är, 1795.*

Encyrtus scutellaris. *Dalman, Kongl. Vetens. Acad. Handl. för är, 1820; Nees ab Ess. Hym. Ich. affin. Monogr. II. 221; Boyer de Fonscolombe, Ann. des Sciences Nat. XXVI. 304.*

Ater, obscurus: oculi et ocelli obscure rufi: antennæ piceæ, basi et apice pallidiores: mesothoracis scutellum basi læte flavum: abdomen nitens: pedes picei; genua fulva; tarsi fulvi, apice fusi: proalæ fuscæ, basi limpidæ; maculæ 2 costales nigro-fuscæ; nervi fusi; metalæ limpidæ. (Corp. long. lin. $1\frac{1}{3}$; alar. lin. $2\frac{1}{4}$.)

Reared from the *coccus* of *Corylus Avellana*, by Mr. Curtis.
Found near Paris by the Comte de Castelneau.

Mas.—Corpus sublineare, crassum, convexum, parce pubescens, scite punctatum: caput transversum, breve, subquadratum, thorace paullo latius; frons abrupte declivis: oculi mediocres, non extantes: antennæ filiformes, pubescentes, corporis dimidio paullo longiores; articulus 1^{us}. gracilis, fusiformis; 2^{us}. brevis; 3^{us}. et sequentes ad 8^{um}. lineares, subæquales; clava fusiformis, articulo 8°. paullo latior et fere duplo longior: thorax ovatus, altus, postice abrupte declivis: mesothoracis scutum latitudine fere longius; paraptera vix convenientia; scutellum rhombiforme: abdomen sublineare, planum, scitissime punctatum, fere glabrum, thorace paullo brevius et angustius.

Sp. 71. En. obscurus. *Mas.* Ater, *tarsi picei, proalæ fusco-fasciatæ.*

Encyrtus obscurus. *Dalman, Kongl. Vetens. Acad. Handl. för är, 1820; Nees ab Ess. Hym. Ich. affin. Monogr. II. 209.*

Ater, subnitens: oculi et ocelli picei: antennæ nigræ: abdomen nitens: pedes nigri; pro- et mesotarsi picei: proalæ subfuscæ, basi limpidæ, fusco fasciatæ, ad costam nigro bimaculatæ; nervi fusi; metalæ limpidæ. (Corp. long. lin. 1; alar. lin. 2.)

May, near London. Found on the white-thorn, in Putney Common, by Mr. Haliday.

Fem.—Corpus crassum, breve, punctatum, obscurum, pubescens: caput transversum, breve, convexum, juxta thoraci latum: antennæ clavatae, breves, corporis dimidio fere breviores; articulus 1^{us}. fusiformis, vix dilatatus; 2^{us}. subcyathiformis; 3^{us}. et sequentes parvi, usque ad 8^{um}. latescentes; clava ovata, plana, articulo 8°. multo latior et plus duplo longior: thorax ovatus, convexus: mesothoracis scutum transversum; parapsidum suturæ non conspicuæ; paraptera supra non convenientia; scutellum brevi-obconicum: abdomen subrotundum, planum, læve, nitens, fere glabrum, thorace brevius et paullo latius; segmenta subtus per

medium carinam fingentia apice apertam; ventralia occulta: oviductus non exertus: alæ amplæ.

Mas.—Antennæ moniliformes, verticillato-pilosæ, corpore breviores; articulus 1^{us}. fusiformis; 2^{us}. brevis, subrotundus; 3^{us}. et sequentes ad 8^{um}. sublineares, discreti; clava fusiformis, pubescens, articulo 8°. angustior et multo longior: abdomen paullo longius quam latum, thorace brevius et angustius.

Sp. 72. En. sericeus. *Mas et Fem.* *Cyaneo-viridis albo-pubescent, abdomen cupreum, antennæ mari fulvæ fem. fuscæ, pedes fusci, femora viridi-cyanea, alæ limpidæ.*

Encyrtus sericeus. *Dalman, Kongl. Vetens. Acad. Handl. för är, 1820; Nees ab Ess. Hym. Ich. affin. Monogr. II. 217.*

Fem.—Obscure viridis, albo-pubescent, subtus cyaneus nitens fere glaber: oculi et ocelli obscure rufi: antennæ nigro-fuscæ; articuli 1°. ad 6^{um}. apice, 7^{us}. et 8^{us}. omnino flavi; clava apice flava: humeri albidi: abdomen cupreo-viride: pedes nigro-fusci; coxæ et femora viridi-cyanea; trochanteres ferruginei; femora apice et tibiæ apice basique albida; tarsi fuscæ; mesopedium tibiæ pallide fuscæ, tarsi flavi apice fuscæ: alæ limpidæ, corpore longiores; squamulæ et nervi fusca. (Corp. long. lin. $\frac{1}{2}$ — $\frac{5}{4}$; alar. lin. $\frac{5}{4}$ — $1\frac{1}{4}$.)

Var. β.—Abdomen cupreum: mesotarsi fuscæ, basi flavi.

Var. γ.—Abdomen cupreum, basi et apice viride.

Var. δ.—Antennis articuli 7^{us}. et 8^{us}. fuscæ.

Mas.—*Cyaneo-viridis, parum nitens: antennæ fulvæ; articuli 1^{us}. basi 2^{us}. que omnino fuscæ: abdomen viridi-cupreum.* (Corp. long. lin. $\frac{1}{2}$ — $\frac{3}{4}$; alar. lin. $\frac{3}{4}$ — $1\frac{1}{4}$.)

Var. β.—Mesothoracis scutelli discus cupreus: mesofemora pallide fusca, basi et apice flava.

July to October; lime-trees, oak-trees, &c. near London; North Wales. Found in Ireland, Scotland, &c. by Mr. Haliday; on elm-trees, at Paris, by the Comte de Castelnau.

Mas.—Corpus breve, latum, obscurum, pubescens, scite punctatum: caput transversum, breve, convexum, thorace vix latius; vertex latus; frons abrupte declivis: oculi mediocres: antennæ filiformes, pilosæ, corpore vix longiores; articulus 1^{us}. fusiformis, vix dilatatus; 2^{us}. brevis; 3^{us}. et sequentes ad 8^{um}. longi, lineares, subæquales; clava fusiformis, articulo 8°. multo longior: thorax

ovatus, convexus: mesothoracis scutum transversum; paraptera non convenientia; scutellum brevi-obconicum: abdomen brevi-ovatum, planum, thorace brevius non latius: pedes graciles: alæ amplæ.

Fem.—Antennæ capitatae, corporis dimidio vix longiores; articulus 2^{us}. longi-cyathiformis; 3^{us}. et sequentes transversi, cyathiformes, brevissimi, usque ad 8^{um}. latescentes; clava subrotunda, articulo 8°. multo latior et plus triplo longior: abdomen subrotundum, planum, subtus carinatum, thorace paullo latius et multo brevius: oviductus occultus.

Sp. 73. En. *Pappus*. Mas et Fem. *Niger*, *thoracis latera fulva*, *abdomen nigro-fuscum*, *antennæ fuscæ fem. apice nigræ*, *pedes fusti*, *alæ limpidæ*.

Mas.—*Niger*: os flavum: oculi et ocelli picci: antennæ fuscæ; articulus 1^{us}. basi subtus fulvus: thoracis latera fulva: abdomen nigro-fuscum: pedes pallide fusti, subtus fulvi: alæ limpidæ; squamulæ et nervi fusca.

Fem.—Antennæ fuscæ; articulus 1^{us}. et 2^{us}. nigri, apice fusti; clava nigra: pedes fusti: alarum nervi fulvi. (Corp. long. lin. $\frac{1}{3}$ — $\frac{1}{2}$; alar. lin. $\frac{2}{3}$ —1.)

Var. β.—*Mas*, pedes fulvi, subtus flavi.

July; on grass beneath trees, near London. Found at Hollywood, near Belfast, by Mr. Haliday.

Fem.—Corpus breve, latum, subquadratum, punctatum, pubescens, obscurum: caput transversum, convexum, juxta thoraci latum: thorax quadratus, planus: mesothoracis scutum transversum; paraptera non convenientia; scutellum subrhombiforme: abdomen subrotundum, thorace brevius vix latius: oviductus occultus: antennæ clavatae, corporis longitudine; articulus 1^{us}. fusiformis, vix dilatatus; 2^{us}. longissime cyathiformis; 3^{us}. et sequentes transversi, parvi, subcyathiformes, usque ad 8^{um}. latescentes; clava sublinearis, apice obtusa, articulo 8°. latior et triplo longior: pedes graciles: alæ amplæ.

Sp. 74. En. *hederaceus*. Fem. *Niger flavo marginatus*, *abdomen nigro-fuscum*, *antennæ fuscæ*, *pedes fulvi*, *alæ limpidæ*.

Ecyrtus hederaceus. *Westwood, Lond. and Edinb. Phil. Mag.*
Third Series. X. 63, 441.

Niger, albo pubescens, subtus pallide flavus: caput fuscum, antice lœte flavum: oculi et ocelli obscure rufi: antennæ fuscæ;

articulus 1^{us}. basi et 2^{us}. apice fulvi: thorax antice et utrinque flavus: abdomen nigro-fuscum; latera pallide flava: pedes fulvi; meso- et metatarsi flavi, apice fulvi: alæ limpidæ; squamulæ et nervi flava. (Corp. long. lin. $\frac{1}{3}$; alar. lin. $\frac{2}{3}$.)

July; on grass beneath trees near London. Found at Holywood, near Belfast, by Mr. Haliday.

Sp. 75. En. punctipes, Mas et Fem. *Nigro-piceus, caput flavum, antennæ mari fulvæ fem. albidae fusco cinctæ apice nigræ, pedes albidi fusco cincti, alæ limpidæ.*

Encyrtus punctipes. *Dalman, Kongl. Vetens. Acad. Handl. för är, 1820; Nees ab Ess. Hym. Ich. affin. Monogr. II. 201.*

Fem.—Caput flavum; vertex læte ferrugineus, postice fuscus: oculi et ocelli obscure rufi: antennis articulus 1^{us}. ater, apice et extus albidus; 2^{us}. niger, apice albidus; 3^{us}. et sequentes ad 6^{um}. fusi, subtus albidi; 7^{us}. et 8^{us}. albidi; clava atra, apice albida: thorax nigro-piceus, albo pubescens: abdomen nigrum, nitens; fascia utrinque abbreviata, pallide flava: corpus subtus fuscum; thoracis latera et prothorax albida: pedes pallide flavi; tibiæ fusco quadri-cinctæ; tarsi apice fusi: alæ limpidæ; squamulæ et nervi fulvi, hi apud stigma obscurores. (Corp. long. lin. $\frac{1}{4}$ — $\frac{1}{2}$; alar. lin. $\frac{1}{2}$ —1.)

Mas.—Antennæ pallide fulvæ, subfiliformes, extrorsum crassiores, corpore non breviores: articulus 1^{us}. fusiformis, dilatatus, pallide flavus, apice supra fuscus; 2^{us}. cyathiformis, flavus, basi fuscus; 3^{us}. et sequentes lati, quadrati, usque ad 8^{um}. paullulum crescentes; clava fusiformis, articulo 8°. duplo longior vix latior.

Var. β.—*Fem.* mesothorax ferrugineus: abdomen nigrum, utrinque et apice flavum.

Var. γ.—*Fem.* *Var. β* similis: antennis articuli 3°. ad 5^{um}. nigri.

Var. δ.—*Fem.* piceus: caput antice fulvum: antennæ pallide fuscæ: abdomen nigro-fuscum: pedes pallide flavi; tibiæ fusco bivittatæ; tarsi apice fulvi.

May to October; on lime-trees, near London; North Wales; Hampshire. Found at Holywood, near Belfast, by Mr. Haliday.

Fem.—Corpus breve, latum, crassum, obscurum, punctatum, brevisime pubescens: caput transversum, breve, convexum, juxta thoraci latum; frons abrupte declivis; oculi magni, extantes:

thorax oblongo-quadratus, fere planus, duplo quam latus longior: mesothoracis paraptera supra non convenientia: scutellum subrhombiforme, breve, latum: abdomen subrotundum, planum, thorace brevius vix latius: oviductus non exertus: antennæ clavatae, corporis dimidio vix longiores; articulus 1^{us}. subtus valde dilatatus; 2^{us}. longi-cyathiformis; 3^{us}. et sequentes brevissimi, subrotundi, usque ad 8^{um}. latescentes; clava subrotunda, plana, articulo 8°. multo latior et plus triplo longior: pedes graciles: alæ amplæ.

Sp. 76. En. fulvifrons. (Haliday MSS.) Fem. *Ferrugineus nigro-varius, abdomen nigrum, antennæ nigro-fuscæ albo cinctæ, pedes flavo-fusci, alæ limpidae.*

Caput flavum; vertex ferrugineus: oculi et ocelli obscure rufi: antennis articulus 1^{us}. niger, basi et apice flavus; 2^{us}. niger, apice flavus; 3^{us}. et sequentes ad 6^{um}. nigro-fusci; 7^{us}. et 8^{us}. albidi; clava atra, apice flava: thorax niger: mesothorax ferrugineus, albo pubescens, scutum antice nigrum: abdomen nigrum, utrinque et apice flavum: corpus subtus pallide flavum: pedes flavi; femora et tibiæ fusco late fasciata; tarsi apice fusci; protarsi fulvi: alæ limpidae; squamulæ et nervi fulva. (Corp. long. lin. $\frac{1}{3}$ — $\frac{1}{2}$; alar. lin. $\frac{2}{3}$ —1.)

Var. β.—Mesothoracis scutum postice nigrum, scutellum nigro cinctum et per medium vittatum: abdomen nigrum, apice fulvum.

Var. γ.—*Var. β* similis: mesothoracis scutum fusco-vittatum.

Var. δ.—*Var. γ* similis: mesothoracis discus nigro-fuscus.

Var. ε.—*Var. δ* similis: caput inter oculos fusco fasciatum: abdomen omnino nigrum.

July; near London. Found at Holywood, near Belfast, by Mr. Haliday; and at Paris by the Comte de Castelneau.

Fem.—Corpus breve, latum, crassum, obscurum, punctatum, brevissime pubescens: caput transversum, breve, convexum, juxta thoraci latum; frons abrupte declivis: antennæ clavatae, corporis dimidio vix longiores; articulus 1^{us}. fusiformis, non dilatatus; 2^{us}. longi-cyathiformis; 3^{us}. et sequentes brevissimi, usque ad 8^{um}. latescentes; clava brevi-ovata, plana, articulo 8°. multo latior et plus duplo longior: thorax oblongo-quadratus, fere planus, duplo longior quam latus, mesothoracis paraptera supra non convenientia; scutellum subrhombiforme, breve, latum: abdomen subrotundum, planum, thorace multo brevius vix latius: oviductus exertus: pedes graciles: alæ amplæ.

Sp. 77. En. apicalis. Fem. *Fulvus aut niger, antennæ flavæ aut nigræ apice albæ, pedes flavi aut fusci, alæ fusco fasciatæ.*

Encyrtus apicalis. *Dalman, Kongl. Vetens. Acad. Handl. för*
är, 1820; Nees ab Ess. Hym. Ich. affin.
Monogr. II. 220.

Nigro-fuscus: caput obscure fulvum; frons et vertex læte ferruginea: oculi et ocelli obscure rufi: antennæ fuscæ; articulus 1^{us}. fulvus; clava albida: thoracis latera fulva: abdomen basi utrinque fuscum, apice pilosum: oviductus flavus, abdominis dimidio brevior; vaginæ flavæ, parce et breviter pubescentes: pedes flavi; coxæ fuscæ; pro- et metapedum femora et tibiæ, necnon mesotibiæ fusco late cinctæ; tarsi apice fuscæ: alæ albæ, apice sublimpidæ; proalæ cuique per medium fascia lata sublunata fusca; squamulæ et nervi fulva, hi apud stigma fuscæ incrassati. (Corp. long. lin. $\frac{1}{2}$; alar. lin. 1.)

Var. β.—Scutellum obscure ferrugineum.

Var. γ.—Antennis articulus 1^{us}. fuscus, apice fulvus.

Var. δ.—Caput utrinque et postice fuscum: antennis articuli 1°. ad 8^{um}. nigro-fusci: thorax supra niger: abdomen nigro-piceum, nitens: pro- et metapedum femora et tibiæ necnon mesotibiæ fusca.

Var. ε.—Caput flavum; vertex læte flavo-ferrugineus: antennis articulus 1^{us}. flavus; 2^{us}. apice flavus; 3^{us}. et sequentes ad 8^{um}. pallide fuscæ: thoracis latera flava: mesothoracis scutum postice flavo marginatum et utrinque maculatum: pedes læte flavi; coxæ, meso- et metatibiæ fuscæ.

Var. ζ.—Var. ε similis: prothorax flavus: mesothoracis scutum flavum, antice fuscum: abdominis segmentum 1^{um}. flavum.

Var. η.—Var. ε similis: abdomen basi fulvum.

Var. θ.—Caput flavum: antennæ flavæ; articuli 2^{us}. basi, 3^{us}. 4^{us}. et 5^{us}. pallide fuscæ: thorax ferrugineus, utrinque et subtus flavus: mesothoracis scutum flavum; discus ferrugineo vittatus: abdomen basi et apice flavum: pedes læte flavi; metatibiæ basi fusco cinctæ.

May, June; on grass beneath trees, near London. Found at Holywood, near Belfast, by Mr. Haliday. Reared from *Coccus Platani Sylvarum* at Paris, by the Comte de Castelnau.

Fem.—Corpus angustum, sublineare, obscurum, scite punctatum, pubescens: caput transversum, breve, convexum, thorace paulo

angustius; vertex latus; frons abrupte declivis: oculi mediocres: antennæ clavatæ, corpore paullo breviores; articulus 1^{us}. fusiformis, subtus valde dilatatus; 2^{us}. longi-cyathiformis; 3^{us}. et sequentes longi, sublineares, usque ad 8^{um}. latescentes et curvantes; clava fusiformis, articulo 8°. latior et plus duplo longior: thorax ovatus, convexus: mesothoracis scutum transversum; paraptera non convenientia; scutellum subrhombiforme: abdomen longi-ovatum, planum, subtus carinatum, thorace paullo longius et angustius: oviductus occultus.

Sp. 78. En. Bohemanni. Fem. *Nigro-piceus aut fulvus, antennæ fuscæ apice flavæ, pedes fuscæ aut flavi, alæ limpidæ.*

Encyrtus Bohemanni. Westwood, Lond. and Edinb. Phil. Mag. Third Series. X. 63, 441.

Nigro-piceus, albo pubescens, subtus pallide flavus: oculi et ocelli obscure rufi: antennæ fuscæ; articulus 1^{us}. niger, basi et apice flavus; 2^{us}. nigro-fuscus, apice flavus; 7^{us}. et 8^{us}. fulvi; clava pallide flava, basi fulva: abdomen fuscum: pedes fuscæ: alæ limpidæ; squamulæ et nervi pallide fusca. (Corp. long. lin. $\frac{1}{3}$ — $\frac{1}{2}$; alar. lin. $\frac{2}{3}$ —1.)

Var. β.—Antennis clava omnino flava: pedes fulvi, supra fusco vittati.

Var. γ.—Caput læte fulvum, subtus flavum: antennis clava omnino flava: thorax piceus, utrinque flavus: abdomen fulvum, subtus flavum: pedes fulvi, subtus flavi; mesopedes flavi, tarsi apice fulvi: alarum squamulæ et nervi fulva.

Var. δ.—*Var. γ* similis: abdomen fuscum, subtus fulvum.

Var. ε.—*Var. γ* similis: scutellum apice fulvum.

Var. ζ.—*Var. γ* similis: thorax læte fulvus, subtus flavus: pedes læte flavi, tarsi apice fulvi; protarsi omnino fulvi.

July; on grass beneath trees, near London.

Fem.—Corpus crassum, nitens, scitissime punctatum, fere glabrum: caput transversum, juxta thoraci latum; vertex angustus; frons convexa, antice abrupte declivis: oculi magni, non extantes: antennæ clavatæ, pubescentes, corporis dimidio paullo longiores; articulus 1^{us}. validus, fusiformis, non dilatatus; 2^{us}. longi-cyathiformis; 3^{us}. et sequentes breves, subquadrati, approximati, usque ad 8^{um}. latescentes; clava longi-ovata, articulo 8°. fere triplo longior et paullo latior: thorax ovatus, planus: mesothoracis

scutum transversum; paraptera supra convenientia; scutellum rhombiforme: abdomen ovatum, planum, thorace paullo brevius.

Sp. 79. En. Cedrenus. Fem. *Fulvus, antennæ fulvæ albo cinctæ apice nigræ, pedes fulvi, alæ subfuscæ albo variæ.*

Fulvus: oculi et ocelli rufi: antennæ fulvæ; articuli 6^{us.} et 8^{us.} albidi; clava nigra: metathorax fuscus: abdomen pallide fulvum: pedes fulvi; tarsi pallidiores: alæ subfuscæ: hic et illuc fere limpidæ; proalæ cuique apud stigma fascia alba; squamulæ et nervi fulva, hi apice fusci. (Corp. long. lin. $\frac{2}{3}$; alar. lin. $1\frac{1}{2}$.)

July; south of France.

Fem.—Corpus angustum, nitens, scite punctatum, vix pubescens: caput mediocre, transversum, subquadratum, convexum, thoracis latitudine; vertex mediocris; frons abrupte declivis; oculi mediocres: thorax ovatus, planus, postice subquadratus: mesothoracis scutum transversum; paraptera non convenientia; scutellum brevi-obconicum: abdomen planum, ovatum, thorace vix longius: oviductus occultus: alæ angustæ.

Sp. 80. En. Myrlea. Fem. *Viridis cupreo varius, abdomen nigro-cupreum, pedes nigri, tarsi flavi, proalæ fusco-bifasciatæ.*

Viridis: oculi et ocelli obscure rufi: thorax cupreo-varius: abdomen nigro-cupreum, basi cupreo-viride micans: pedes nigri; genua fulva; tibiæ nigro-fuscae; tarsi flavi, apice fusci: alæ limpidæ; proalæ cuique fascia lata apud stigma neonon apex fuscae; squamulæ et nervi fusca. (Corp. long. lin. $\frac{3}{4}$; alar. lin. 1.)

July; south of France.

Fem.—Corpus breve, latum, subtrigonum, pubescens, nitens, scitisime punctatum: caput transversum, subhemisphaericum, supra planum, thorace angustius; vertex latus; frons antice producta, aciem quasi fingens, subtus retracta: oculi mediocres, non extantes: antennæ clavatae, graciles, corporis dimidio paullo breviores; articulus 1^{us.} fusiformis, crassus; 2^{us.} longi-cyathiformis; 3^{us.} et sequentes transversi, minimi, usque ad 8^{us.} latescentes; clava longi-ovata, articulo 8^{o.} multo latior et quintuplo longior: thorax planus, vix quam latus longior: mesothoracis scutum transversum; paraptera non convenientia; scutellum brevi rhombiforme: abdomen longi-obconicum, planum, lave, thorace longius et paullo angustius, apice acuminatum: oviductus exerts; vaginæ breves, pubescentes: pedes validi, pubescentes.

Sp. 81. En. *nubilipennis*. (Curtis's Guide.) Fem. *Cyaneo-viridis*, *abdomen nigro-cupreum*, *antennæ flavo nigro-cinctæ*, *pedes flavi*, *femora nigra*, *proalæ fuscæ albo variæ*.

Encyrtus Dalmanni? *Westwood, Lond. and Edinb. Phil. Mag.*
Third Series. X. 63, 440.

Cyaneo-viridis: caput læte viride: oculi et ocelli obscure rufi: antennæ flavæ; articulus 1^{us}. niger; 2^{us}. fuscus, apice flavus; 3^{us}. 4^{us}. et 5^{us}. supra fulvi; clava basi nigra, apice fulva: abdomen nigro-cupreum: oviductus vaginae nigro-fuscæ, apice flavæ: pedes nigri; tarsi flavi, apice fusci; pro- et mesotibiæ flavæ, basi nigræ: alæ limpidæ, apice subfuscæ; proalæ cuique discus obscure fuscus maculis 3 limpidis, 1^a. parva apud stigma, 2^a. magna ad alæ apicem propior et in discum descendens, 3^a. ad alæ marginem posticum 2^a. compar; squamulæ et nervi fusca, hi apud stigma nigri. (Corp. long. lin. $\frac{1}{3}$; alar. lin. $\frac{2}{3}$.)

Var. β.—Mesothoracis scutum postice purpureo-cyaneum: abdominis latera viridia.

July; on grass in woods, near London.

Fem.—Præcedenti similis at corpus multo longius: thorax et abdomen ovata.

Sp. 82. En. *Zetterstedtii*. Fem. *Viridis cupreo-varius*, *abdomen nigro-cupreum*, *antennæ nigrae flavo cinctæ*, *pedes flavi*, *femora nigra*, *proalæ fusco variæ*.

Encyrtus *Zetterstedtii*. *Westwood, Lond. and Edinb. Phil. Mag.* *Third Series.* X. 63, 440.

Læte viridis: oculi et ocelli pieci: antennæ nigræ; articuli 7^{us}. et 8^{us}. pallide flavi; clava fusca: thoracis discus cupreo-varius: mesothoracis scutellum apice viridi-cyaneum: abdomen nigro-cupreum: oviductus vix exertus: pedes nigri: tibiæ flavæ, basi nigræ; tarsi flavi, apice fusci; metatibiæ nigræ, apice flavæ: alæ limpidæ; proalæ cuique fasciæ 3 connexæ et apex fuscæ, ad costam obscuriores; squamulæ et nervi fusca, hi apud stigma nigri. (Corp. long. lin. $\frac{1}{2}$; alar. lin. $\frac{3}{4}$.)

Found with *E. nubilipennis*.

Fem.—Corpus parvum, breve, compactum, scitissime punctatum, pubescens, nitens: caput fere planum, juxta thoraci latum, antice convexum, longitudine vix latius; vertex angustus; frons producta: oculi magni, non extantes: antennæ clavatae, corporis
NO. II. VOL. V. Q

dimidio vix longiores; articulus 1^{us}. maxime dilatatus et extus productus; 2^{us}. parvus; 3^{us}. et sequentes ad 8^{um}. lati, brevissimi, cyathiformes, pubescentes; clava ovata, magna, articulo 8°. latior et plus triplo longior: thorax quasi conicus, fere planus, postice quadratus: mesothoracis scutum transversum; paraptera non convenientia; scutellum brevi-obconicum: abdomen brevi-ovatum, planum, apice acuminatum, thorace paullo latius et brevius; segmenta 1^{um}. et 2^{um}. magna: oviductus occultus: pedes validi: alæ angustæ.

Sp. 83. En corniger. (Haliday MSS.) Fem. *Nigro-cyaneus*, *caput læte viride*, *abdomen nigro-cupreum*, *antennæ nigræ*, *pedes nigro-fusci*, *tarsi flavi*, *proalæ fuscæ apice limpidæ*.

Nigro-cyaneus: caput læte viridi micans: oculi et ocelli obscure rufi: antennæ nigræ: abdomen nigro-cupreum: pedes fusci; coxæ et femora nigra; tarsi flavi, apice fusci; genua fulva; proet mesotibiae apice flavæ; metatibiae nigro-fuscæ; mesofemora fusca: proalæ obscure fuscae, apice limpidæ; squamulæ et nervi fusca; metalæ limpidæ. (Corp. long. lin. $\frac{1}{4}$ — $\frac{1}{3}$; alar. lin. $\frac{1}{2}$ — $\frac{1}{2}$.)

Found in the Isle of Man, by Mr. Haliday. July; Forest of Fontainbleau.

Fem.—Corpus longum, angustum, nitens, pubescens, scitissime punctatum: caput transversum, supra planum, juxta thoraci latum; vertex latus; frons antice producta et quasi aciem fingens, subtus abrupte retracta: oculi mediocres: antennæ maxime incrassatae, pubescentes; articulus 1^{us}. latissimus, apice hispinosus; cæteri quasi clavam fingentes fusiformem; 2^{us}. angustus; 3^{us}. et sequentes transversi, brevissimi, subcyathiformes, usque ad 8^{um}. latescentes; clava conica, articulo 8°. latior et flagelli dimidio longior: thorax ovatus, planus: prothorax supra conspicuus: mesothoracis scutum transversum; paraptera non convenientia; scutellum obconicum: abdomen longi-ovatum, planum, thorace angustius vix longius, apice angustum et acuminatum: oviductus exerts: pedes validi: alæ angustæ. (*Cerapterocerus*, *Westwood*.)

Sp. 84. En. mirabilis. Fem. *Cyaneo-viridis*, *abdomen nigro-cupreum*, *antennæ nigræ*, *pedes flavi*, *femora nigra*, *proalis discus fuscus radios emittens concolores*.

Cerapterocerus mirabilis. *Westwood*, *Loudon's Mag. Nat. Hist.* VI. 495.

Læte cyaneo-viridis: oculi et ocelli picei: antennæ nigræ: abdomen nigro-cupreum: oviductus vaginæ nigræ, pubescentes, breves:

pedes nigri; tibiæ flavæ, basi nigro-fuscæ; tarsi flavi, apice fusti; metatibiæ nigræ, apice flavæ: propedes flavi; femora supra et tibiæ basi pallide fusca: alæ limpidæ; proalæ cuique discus fuscus radios 6 emittens latos alæ marginem attingentes, vittæ quoque 2 basales radiis connexæ et macula parva apud costam fuscæ; squamulæ et nervi fusca, hi apud stigma nigri. (Corp. long. lin. $\frac{2}{3}$ — $\frac{3}{4}$; alar. lin. $\frac{5}{4}$ —1.)

Var. β.—Caput viride: thorax æneo-viridis.

May; on grass beneath oaks, near London.

Fem.—Corpus longum, angustum, depresso-læve, nitens, glabrum: caput oblongum, brevi-ovatum, planum, thorace latius; vertex sat latus: oculi mediocres, non extantes: antennæ clavatae, crassæ, pubescentes, corporis dimidio paullo longiores; articulus 1^{us}. dilatatus; 2^{us}. cyathiformis; 3^{us}. et sequentes transversi, brevissimi, usque ad 8^{um}. latescentes; clava ovata, articulo 8°. vix latior sed plus triplo longior: thorax longi-conicus, supra planus: segmenta in unum confusa: abdomen longi-ovatum, depresso-læve, thorace paullo latius non longius, apice acuminatum et hirtum: oviductus occultus: pedes graciles; metafemora lata; mesotarsi vix incrassati: alæ nullæ. (Ectroma, *Westwood*.)

Sp. 85. En. fulvescens. Fem. *Piceus, apterus, antennæ nigræ, pedes flavi, metafemora nigra.*

Ectroma fulvescens. *Westwood, Lond. and Edinb. Phil. Mag. and Journ. of Science. Third Series.* III. 344.

Piceus: oculi et ocelli obscure rufi: antennæ —: pedes flavi; unguis fuscus; metafemora nigra. (Corp. long. lin. $\frac{2}{3}$)

July; on grass beneath trees, near London.

Mas.—Corpus breve, crassum, convexum, punctatum, obscurum, pubescens: caput transversum, breve, subquadratum, thorace vix angustius; vertex latus; frons abrupte declivis: oculi mediocres, non extantes: antennæ submoniliformes, latae, pubescentes, corpore vix breviores; articulus 1^{us}. fnsiformis; 2^{us}. brevis; 3^{us}. angustus; 4^{us}. et sequentes ad 8^m. lati, oblongo-subquadrati; clava fusiformis, articulo 8°. duplo longior non latior: thorax ovatus, altus: mesothoracis scutum transversum; paraptera non convenientia; scutellum subrhombiforme: abdomen longi-obconicum, compressum, planum, nitens, læve, thorace brevius et angustius, apice hirtum: sexualia vix exerta: pedes graciles; mesotarsi vix incrassati.

Fem. ?—Antennæ clavatae, corporis dimidio breviores; articulus 1^{us}. subtus dilatatus; 2^{us}. longi-cyathiformis; 3^{us}. et sequentes subcyathiformes, brevissimi, usque ad 8^{um}. latescentes; clava brevi-ovata, articulo 8°. latior et plus duplo longior: thorax quam mari latior: abdomen brevi-ovatum, planum, subtus carinatum, thorace brevius et paullo latius: oviductus occultus: mesotarsi dilatati.

Sp. 86. En. Gabestus. Mas et Fem. *Ater, abdomen nigro-cupreum, antennæ mari nigro-fuscæ, fem. nigræ, pedes nigro-fusci, tarsi flavi, alæ mari limpidæ, fem. subfuscæ.*

Mas.—*Ater*: oculi et ocelli picei: antennæ nigro-fuscæ: abdomen nigro-cupreum: pedes nigri; genua et tarsi fusca; mesopedum tibiæ fusca apice flavæ, tarsi flavi apice fusci: alæ limpidæ; squamulæ fusca; nervi fulvi.

Fem.—Antennæ nigræ: tarsi fulvi, apice fusci: mesopedum femora nigro-fusca, tibiæ flavæ basi fusca: alæ subfuscæ; nervi fusci. (Corp. long. lin. $\frac{1}{3}$ — $\frac{1}{2}$; alar. lin. $\frac{2}{3}$ — $\frac{5}{4}$.)

Var. β.—*Mas*, protibiae nigro-fuscæ: metatarsi fulvi apice fusci.

Found at Holywood, near Belfast, by Mr. Haliday.

Mas.—Præcedenti similis: antennæ filiformes, verticillato pilosæ, juxta corpori longi; articulus 1^{us}. fusiformis; 2^{us}. subrotundus; 3^{us}. et sequentes longi-ovati, subæquales; clava fusiformis, acuminata, articulo 8°. multo longior: sexualia subexerta.

Sp. 87. En. Barca. Mas. *Ater, abdomen nigro-aeneum, antennæ fulvæ basi nigro-fuscæ, pedes nigro-fusci, tarsi flavi, alæ limpidæ.*

Ater: oculi et ocelli picei: antennæ fulvæ; articuli 1^{us}. et 2^{us}. nigro-fusci: abdomen nigro-aeneum: sexualia flava: coxae et femora nigra; pro- et mesofemora apice flava; propedum tibiæ fusca subtus flavæ, tarsi fulvi; mesopedum tibiæ nigro-fusca apice et basi flavæ, tarsi flavi apice fulvi; metapedum tibiæ nigro-fusca, tarsi fulvi: alæ limpidæ; squamulæ et nervi fusca. (Corp. long. lin. $\frac{1}{4}$ — $\frac{1}{3}$; alar. lin. $\frac{1}{2}$ — $\frac{2}{3}$.)

September; Isle of Wight. Found at Holywood, near Belfast, by Mr. Haliday.

Mas.—Corpus breve, latum, pubescens, scite punctatum, parum nitens: caput transversum, breve, convexum, juxta thoraci latum; vertex latus; frons abrupte declivis: oculi mediocres: antennæ

filiformes, pilosæ, corpore paullo longiores; articulus 1^{us}. fusiformis, gracilis; 2^{us}. cyathiformis; 3^{us}. et sequentes longi, sublineares, æquales; clava fusiformis, articulo 8°. fere duplo longior: thorax ovatus, convexus: mesothoracis scutum transversum; paraptera non convenientia; scutellum brevi-obconicum: abdomen brevi-ovatum, subquadratum, planum, thorace brevius vix angustius: pedes graciles.

Sp. 88. En. Elpis. Mas. *Ater, antennæ nigræ, pedes nigro-fusci, tarsi fulvi, alæ limpidæ.*

Ater: oculi et ocelli obscure rufi: antennæ nigræ: abdomen nitens, lœve, fere glabrum: pedes fusci; femora nigro-fusca; genua, tibiæ apice et tarsi fulva, hi apice fusci: alæ limpidæ; squamulæ fuscae; nervi fulvi. Corp. long. lin. $\frac{1}{4}$ — $\frac{1}{3}$; alar. lin. $\frac{1}{2}$ — $\frac{2}{3}$.)

Fem.?—Mari latior: antennæ subclavatae, graciles, corporis dimidio longiores; articulus 1^{us}. gracilis, fusiformis; 2^{us}. longi-cyathiformis; 3^{us}. et sequentes breves, subquadrati, usque ad 8^{us}. minime latescentes; clava fusiformis, articulo 8°. paullo latior et triplo fere longior: abdomen rotundatum, thorace multo brevius et paullo latius: oviductus occultus.

Pedes nigri; tarsi fulvi, apice fusci; pro- et mesotibiæ fuscae; mesotarsi flavi, apice fulvi.

Var. β.—Antennæ nigro-fuscae.

August; on grass in fields, near London.

Mas.—Corpus breve, sat latum, nitens, pubescens, scitissime punctatum: caput breve, transversum, subquadratum, juxta thoraci latum; vertex latus; frons impressa, abrupte declivis: oculi mediocres, extantes: antennæ filiformes, graciles, corpore vix longiores; articulus 1^{us}. longi-fusiformis, gracilis; 2^{us}. brevis, subcyathiformis; 3^{us}. et sequentes longi, lineares, hirti, usque ad 8^{us}. paullulum curtantes; clava fusiformis, articulo 8°. fere duplo longior: thorax ovatus, planus: mesothoracis scutum quam longum paullo latius; paraptera non convenientia; scutellum brevi-obconicum, apice obtusum: abdomen obconicum, planum, apice acuminatum, thorace brevius vix angustius: sexualia vix exerta; pedes graciles: alæ amplæ.

Fem.—Caput quam mari longius, vix thoracis latitudine; frons convexa: oculi non extantes: abdomen ovatum, supra planum, subtus carinatum, thorace paullo latius vix longius: oviductus occultus: antennæ clavatae, graciles, corporis dimidio longiores; articulus 2^{us}. longi-cyathiformis; 3^{us}. et sequentes breves, sub-

quadrati, usque ad 8^{um}. latescentes; clava fusiformis, articulo 8°. latior et fere triplo longior.

Sp. 89. En. Scythis. Mas et Fem. *Viridis cupreο et æneο variο, abdomen cupreο, antennæ fulvæ, pedes flavi, metapedes fusi aut nigri, alæ limpidæ.*

Mas.—Læte aureo-viridis: oculi et ocelli obscure rufi: antennæ fulvæ; articulus 1^{us}. læte flavus: abdomen cupreum: pedes flavi; tarsi fulvi; metapedum femora et tibiæ fusca, apice et basi flava: alæ limpidæ; squamulæ et nervi fulva.

Fem.—*Viridis*: caput obscure cupreum: antennæ fulvæ; articulus 1^{us}. nigro-viridis, apice fulvus; 2^{us}. supra fuscus: mesothoracis scutellum viridi-cupreum: abdomen cupreum, basi viridi micans: pedes flavi; metapedum femora nigro-fusca, tibiæ basi fuscae: alæ sublimpidæ, quam mari breviores et angustiores. (Corp. long. lin. $\frac{1}{4}$ — $\frac{1}{2}$; alar. lin. $\frac{1}{2}$ —1.)

Var. β.—*Mas*, *thorax viridis*: antennis articulus 1^{us}. apice fuscus: femora et metatibiæ nigra, apice et basi flava; mesotibiæ basi fuscae.

Var. δ.—*Mas*, *Var. β similis*: mesothoracis scutum cyaneo-viride.

Var. ε.—*Fem.* thorax viridi-æneus.

Var. ζ.—*Fem.* protibiæ supra basi pallide fuscae; mesotibiæ basi fusco-cinctæ; metatibiæ fuscae, apice flavæ.

Var. η.—*Fem.* *Var. ζ similis*: thorax æneus.

Var. θ.—*Fem.* caput viride.

Var. υ.—*Fem.* caput et thorax omnino viridia.

June to October; on heath, near London; Isle of Wight; Forest of Fontainbleau. Found at Holywood, near Belfast, by Mr. Haliday.

Fem.—Corpus angustum, sublineare, pubescens, scitissime punctatum, parum nitens: caput transversum, breve, convexum, juxta thoraci latum; vertex latus; frons abrupte declivis: oculi mediocres: antennæ clavatae, graciles, corporis dimidio multo longiores; articulus 1^{us}. fusiformis, gracilis; 2^{us}. longi-cyathiformis; 3^{ns}. et sequentes subquadrati, usque ad 8^{um}. latescentes; clava fusiformis, articulo 8°. paullo latior et plus triplo longior: thorax ovatus, planus: mesothoracis scutum transversum; paraptera non convenientia; scutellum brevi-obconicum: abdomen ovatum, planum, thorace paullo brevius vix latius: oviductus occultus.